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AUTOMATIC FEED PAINT AND TEXTURE APPLICATOR

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2 Claims. (Cl. 15—132.5)

In my application on a mastic-applying and surface-finishing tool, Serial No. 283,378, filed April 21, 1952, (now Patent No. 2,711,098, dated June 21, 1955) I show a casing provided with a compartment for holding mastic, and a hinged plate for forcing mastic from the compartment and onto a surface over which the tool is moved. A handle is secured to the hinged plate and is used for supporting the tool as well as for swinging the plate for ejecting the mastic.

In another application of mine on a mastic applicator and finishing tool, Serial No. 374,722, filed August 17, 1953, I show the mastic-holding casing provided with a bottom plate that has an opening therein for the discharge of mastic from the compartment provided in the casing. The compartment can be filled with a new supply of mastic by using the same opening for forcing mastic into the compartment.

In the present invention, I use the same type of casing with a hinged plate for forming a compressible compartment that can hold liquid paint, and I mount a roller adjacent to a discharge opening or nozzle in the compartment so that pressure applied to the plate will swing it and force paint from the compartment and onto the paint applicator roller. The nozzle includes a hinged member that extends across the width of the casing and adjustable spring means urge the member into yielding contact with the periphery of the roller. It is by this mechanism that the amount of paint delivered to the roller can be controlled when the hinged plate is depressed. The compartment can be replenished with paint by opening the hinged member and using the nozzle as the point of entrance.

The length of the paint-applying roller is at least equal to the width of the casing. This permits the tool to apply paint in corners. If less than the length of the roller is needed for paint-applying purposes, I provide a slide that can be manually adjusted for closing off any desired portion of the nozzle.

When the rim of the nozzle bears against the roller periphery and the hinged member is also yieldingly pressed against the roller, it is likely that the roller will tend to skid over the surface on which the paint is to be applied rather than rotate on the surface. To overcome any skidding effect, I provide the roller with a plurality of radially extending pins that project from all portions of the roller periphery. A soft layer of material encloses the roller and pins and when this layer is not compressed, it will embed the outer ends of the pins so that they will be invisible. However, as soon as the roller is placed on the surface to be painted and pressure is applied to the plate for forcing paint or other texture material onto the roller periphery, the portion of the roller contacting the surface will be compressed to a point where the outer ends of the pins in this portion will project through the layer of soft material and will contact the surface. An advancement of the tool will cause the pins to rotate the roller. As the roller rotates, additional pins will be

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brought to bear on the surface and therefore continued traction will be provided sufficient to prevent the roller from slipping.

Other objects and advantages will appear in the following specification, and the novel features of the device will be particularly pointed out in the appended claims.

My invention is illustrated in the accompanying drawing forming a part of this application in which:

Figure 1 is a top plan view of the tool; and

Figure 2 is a side elevation.

While I have shown only the preferred form of my invention, it should be understood that various changes or modifications may be made within the scope of the appended claims without departing from the spirit and scope of the invention.

In carrying out my invention, I provide a casing indicated generally at A and this casing has two side walls 1 and 2 that are held apart in parallel relation by a bottom wall 3 and an arcuate-shaped rear wall 4. Figure 2 shows a V-shaped fulcrum member 5 that is placed at the leading end 6 of the tool casing. A pressure plate B has a bevelled leading edge 7 that is fulcrumed in the V-shaped recess formed by the fulcrum member 5. The rear edge 8 of the plate B has a flexible wiping element 9 that rides over the inner surface 4a of the arcuate rear wall 4, see Figure 2. The side edges 10 and 11 of the pressure plate B are provided with flexible wiping elements 12 and these will ride along the inner surfaces of the side walls 1 and 2. The flexible wiping elements 9 and 12 constitute a seal between the pressure plate B and the inner surfaces of the walls of the casing A.

The side walls 1 and 2, the bottom wall 3, the arcuate end wall 4, and the pressure plate B form a compressible liquid-tight compartment that may receive paint or other material. Figure 2 shows the bottom wall 3 provided with an elongated opening 13 that preferably extends across the width of the casing and is disposed adjacent to the arcuate rear wall 4. A flange 14 extends along one side of the opening 13 and a second flange 15 is carried by the inner surface 4a of the arcuate rear wall 4. The two flanges act as guides for a slide-valve member C, see Figure 1. The valve member is in the shape of a strip of material that is longer than the width of the casing so that the exposed end C¹ will still project beyond the side wall 1 of the casing even when the slide valve is completely closed. A handle or knob 16 is mounted on the free end of the slide valve and the operator can grasp the knob for moving the valve to uncover any portion of the slot 13 desired.

I provide an applicator roller indicated generally at D and this roller is rotatably mounted between the extended portions 1a and 2a of the sides 1 and 2. I have shown the portions 1a and 2a lying in the same planes as the side walls 1 and 2. If it is desired to make the length of the roller D equal to the overall width of the casing A, then the portions 1a and 2a would be off-set slightly to permit this. The roller D is adjustably mounted between the portions 1a and 2a and Figure 2 shows a slot 17 provided in the extension 2a, and a screw 18 is received in the slot and forms an axis for the roller D. The extension 1a has a slot (not shown) similar to the slot 17 and this permits the roller to be moved toward or away from a fixed lip 19 that is provided at the lower end of the arcuate wall 4. Normally the outer periphery 20 of the roller is in contact with the lip 19.

The roller has a compressible layer of soft material D¹ wrapped therearound, and it is the outer periphery 20 of this material that contacts with the fixed lip 19 of the outlet nozzle. The layer D¹ will also ride on the surface E that is to be painted. A plurality of pins F extend radially from the core 21 of the roller and the outer ends of these pins are disposed just below the periphery 20 of